**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following three steps:

1. **Determining the solution requirements**
2. **What needs to be established?**

What info needs to be provided, what data is needed and what functionality must be included in the website solution.

1. **How is the problem best defined?**

If the needs of an organization are not being met.

1. **The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.**

**Efficiency:** Refers to the time, cost and effort that might be put into producing a solution.

**Effectiveness:** refers to the quality, relevancy, timelessness and clarity of the solution.

1. **What type of organisation is the ILT?**

The ILT is a non-profit professional community organisation.

1. **In your own words, define the problem for ILT.**

The ILT’s problem was that it used an inefficient method of communication. Using traditional methods of communication takes time and is inefficient.

1. **Identifying data and information needed for the solution, p 62;**

**Need to identify where data is coming from for online community – inside or outside**

* 1. **In the ILT case study what is the information needed for the solution?**

The data would come from within the organisation, such as policy docs, contacts documentation or from outside the organisation such as info regarding local indigenous history.

1. **Identifying the functions needed for the online community solution, p 63**
   1. The functions needed for online communities can be separated into 2 distinct categories,
      * how the solution functions and
      * attributes of the solution. List the characteristics of each of these.
2. **What are the functions of the ILT website solution?**

* Broadcasting info to the community
* Exchanging info between offices about projects they are working on and any challenges they are having
* Encourage community groups to exchange info in a secure environment
* Store docs containing knowledge about the organisation in central secure environment.

1. **Identify the constraints on the solution, p 64**
   1. List the technical and non-technical constraints.

**Technical Constraints:**

* The cost of the solution
* The speed or time that it takes to access or exchange info
* How secure the solution needs to be
* Number of people accessing at the same time

**Non Technical Constraints:**

* Are these issues of privacy
* Copyright issues
* Cultural, gender or age constrains

* 1. **What are the constraints on the ILT solution?**

The strict rules regarding the use of deceased Aboriginals and the use of their names on public documents.

1. **Determine the scope of the solution, p 66**
   1. **What needs to be considered in the scope of the solution?**

When determining the scope of the solution, we need to consider the benefits the solution will have on efficiently and effectiveness. The scope should clearly outline what the solution can and can’t do.

* 1. In the ILT case study list the benefits or the scope of the solution in terms of
     1. Efficiency and

TIME: The time to access and transfer info will be reduced because a web solution is being used

COST: Cost will be reduced as people working in each of the offices will be able to access centrally located docs.

EFFORT: The sharing of info will allow each of the offices to build on the info they have rather than having to rediscover it when working on a project.

* + 1. Effectiveness

QUALITY: Quality of decision making will be higher due to the collaboration involved in a web solution.

RELEVANCY and TIMELESSNESS: Info is relevant and timely.

COMPLETNESS: Info that is compiled using collaborative tools by the online community will be more complete.